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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,462	10/16/2000	Gotthard Schmid	A-2569	3793
24131	7590	05/20/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			YAN, REN LUO	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/688,462	Applicant(s) <b>SK</b> SCHMID, GOTTHARD	
	Examiner Ren L Yan	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-11 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-11 and 14-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 14, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pensavecchia(5,660,108) in view of Stark et al(5,040,460). The patent to Pensavecchia teaches the detailed structure of a modular printing machine as claimed including a first printing unit 200 having a central impression cylinder 222 and four printing devices 224a-224d assigned thereto and a second printing unit 300 having a second impression cylinder 322 and a sheet feeding device disposed upline of the second impression cylinder 322, and a perfecting assembly 400 serving as a coupling device for selectively coupling the first and second printing units to one another for in line operation. The perfecting assembly includes a reversing cylinder for reversing and feeding the sheet from the first printing unit to the second printing unit. Each of the printing units also has its own sheet feeding device and an adjusting device assigned for register correction of the sheet to the feeding device and therefor to the impression cylinder. The detailed structure of the sheet feeding device is shown in Fig. 1 of Pensavecchia wherein a front stopper (fingers) 77a moves vertically to register the sheet to be parallel with the axis of the impression cylinder and a conventional means is activated to push the sheet horizontally against a side guide to assure that the sheet is squared up and is in the correct axial position relative to the impression

Art Unit: 2854

cylinder. See Figs. 1, 2 and column 4, lines 46-53 in Pensavecchia for details. However, Pensavecchia does not teach to displace the feed drums 72a and 72b for adjusting and correcting registration of the feed drums and does not show the use of sheet position sensors. Stark et al teach in a sheet fed rotary printing machine having a sheet register adjusting assembly for a sheet feed drum 4 the use of axial displacement and pivotal displacement of the sheet feed register drum to provide lateral register adjustment and circumferential register adjustment of the sheet feed drum 4 and the use of sheet position sensor 103 connected electronically to the computer unit 101 for feeding the computer unit with register signals. See the abstract, Figs. 1-3, and column 5, line 23 through column 6, line 52 in Stark et al for example. It would have been obvious to those having ordinary skill in the art to provide the sheet printing machine of Pensavecchia with the sheet feed drum adjustment structure and computer control appropriately disposed as taught by Stark et al in order to ensure that the sheet feed drums and the sheet carried by the drums are properly registered with respect to the downstream impression cylinder. With respect to claim 18, to adjust the sheet feeding device with respect to the impression cylinder of each printing unit during the printing operation after the two printing units have been coupled is an inherent feature of the printing machine in Pensavecchia.

Claims 3-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pensavecchia in view of Stark et al as applied to claim 1 above, and further in view of Drapatsky et al(5,103,733). Pensavecchia, as modified by Stark et al, teaches all that is claimed with the exception that the applied references do not appear to teach the use of multiple sheet position sensors for register correction of the sheet and the sheet feed drum. Drapatsky et al teach in a sheet-fed printing machine the conventional use of multiple photo-sensors to monitor the

Art Unit: 2854

positions of the sheets being processed in relation to the angular position of the impression cylinder and electronic control means provided to adjust the position of the sheet to register the sheets with respect to the position of the printing cylinders. See Figs. 4-8 in Drapatsky et al for example. In view of the teachings of Drapatsky, it would have been obvious to those having ordinary skill in the art to provide the printing machine of the '108 patent, as modified by Stark et al, with the sheet register- adjusting device having multiple sheet position sensors appropriately disposed as taught by Drapatsky in order to ensure proper registration of the sheets with respect to the various printing units and the printing quality. With respect to claim 15, to apply the teaching of '108 patent to the known printing units as recited in order to achieve multi-color perfecting printing on a sheet by those having ordinary skill in the art would have been most obvious.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pensavecchia in view of Stark et al as applied to claim 1 above, and further in view of Giori et al(6,101,939). Pensavecchia, as modified by Stark et al, teaches all that is claimed except that the two impression cylinders appear to be the same size. The patent to Giori et al teaches in a sheet fed rotary printing machine the conventionality of using two impression cylinders 2 and 21 of different sizes based on the number of colors each impression cylinder is used to print. It should be pointed out that blanket cylinder 2 serves as an impression cylinder for blanket cylinder 3 and vice versa and is used to print four colors. Impression cylinder 21 is only used for two-color printing and therefore is of a smaller size. See the figure in Giori et al for example. It would have been obvious to those having ordinary skill in the art to provide the printing machine of Pensavecchia, as modified by Stark et al, with a smaller second impression cylinder as taught by

Giori et al to save manufacturing cost and operating space if less than four colors are printed by the second printing unit.

Applicant's arguments filed on 3-2-2004 have been fully considered but they are not persuasive. Applicant argued that Stark teaches away from the present invention and the subject matter of claim 1 because by applying the teaching of Stark to Pensavecchia, one would end up with a feed drum not disposed immediately up-line of the second impression cylinder because the transfer drum would be disposed between the feed drum and the impression cylinder. This argument is faulty because the examiner did not suggest to physically replace the feed drums 72a and 72b of Pensavecchia with the feed drum and the transfer drum of Stark. What was proposed by the examiner was to provide the existing feed drums 72a and 72b of Pensavecchia with the drum adjustment structure and computer control appropriately disposed as taught by Stark in order to ensure that the sheet feed drums and the sheet carried by the drums are properly registered with respect to the downstream impression cylinder. In response to applicant's argument, it should be pointed out that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Thus, it is believed that one of ordinary skill in the art, when presented with the collective teachings of Pensavecchia and Stark, would be motivated to apply the feed drum adjustment structure and computer control as taught by Stark to the feed drums of Pensavecchia in order to

accurately register the sheet with respect to the impression cylinder and to improve printing quality.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ren L Yan  
Primary Examiner  
Art Unit 2854

Ren Yan  
May 17, 2004